WHAT IS CLAIMED

1. An elevator (1) with a cage (3) held on a support (8), which is movable in upward and downward directions in a vertically extending shaft (2) by means of a drive motor (6) acting on said support (8) via a sheave (7) and being arranged in said shaft (2), said drive motor via at least one drive belt (15) acting on a pulley (9) arranged in parallel-axial manner, said pulley being combined with said sheave (7) coaxially correlated thereto to form a flat drive wheel (5), the circumferential frictional surface (10) of a brake being integrated into said drive wheel (5),
characterized in that
said support (8) consists of at least one flat band or synthetic rope which is directly wound around a part of said hub (17) of said drive wheel (5), said part on the corresponding position having a section showing the required sheave profile and thus forming said sheave (7).

2. The elevator as defined in claim 1,
characterized in that
the outer diameter of said surface wound of said sheave profile essentially corresponds to the outer diameter of said bearing (14) closest to said sheave profile (6), plus twice the amount of the wall thickness meaningful with respect to stability and stiffness aspects in this area, of the here sleeve-like section of said hub (17).

Sub A2 3. The elevator as defined in one of the preceding claims,
characterized in that the width of said drive motor (6) including the pulley (6a) supported by it in axial direction does not exceed the width of said drive wheel (5) also in axial direction thereof.

4. An elevator as defined in one of the preceding claims, characterized in that
said drive motor (6) is a disc armature motor.

5. An elevator as defined in one of the preceding claims, characterized in that
said drive motor (6) at least partly is arranged within said pulley (6a) supported by it.

6. An elevator as defined in one of the preceding claims, characterized in that
said drive motor (6) is an external rotor motor whose rotor outside is constructed as pulley (6a) for said at least one drive belt (15).

7. An elevator as defined in one of the preceding claims, characterized in that
said hub (17) supporting said sheave profile (16) in total is made in one piece.

Fig 4 u. 6

8. An elevator as defined in one of the preceding claims, characterized in that
said hub (17) supporting said sheave profile (16) and said circumferential frictional surface (10) of said brake are made in one piece.

Fig 7

9. An elevator as defined in one of the preceding claims, characterized in that
said hub (17) supporting said sheave profile (16), said circumferential frictional surface (10) of said brake and said pulley (9) are

made in one piece.

10. An elevator as defined in one of the preceding claims, characterized in that
said pulley (9) protrudes over said sheave (16, 17), wherein said pulley (9) can be embodied in a manner bent at right angle for forming a room for accommodating a brake means (18, 19), i.e. consists of an inner section (9b) bent at right angle and a disc-shaped section (9c) following in radially outward direction, supporting on its outer circumference a wheel rim (9a) onto which act said drive belts.

Fig 4

11. An elevator as defined in one of the preceding claims, characterized in that
said section (9b) bent at right angle on its outer side (seen from its axis of rotation) forms the circumferential frictional surface (10) of a drum brake.

12. An elevator as defined in one of the preceding claims, characterized in that
said section (9b) bent at right angles comprises an circumferential extension (9d) forming the circumferential frictional surface of a brake drum, said extension (9d) seen in axial direction protrudes over the outermost rim of said wheel rim (9a).

13. An elevator as defined in one of the claims 1 to 10, characterized in that
said wheel rim (9a) onto which act said drive belts on its inner side (seen from its axis of rotation) forms the circumferential frictional surface (10) of a drum brake.

14. An elevator as defined in one of the preceding claims, characterized in that
said flat band (8) consists of steel, of synthetic material or of a combination of synthetic material and steel.

15. An elevator as defined in one of the preceding claims, characterized in that
said axis of rotation (12) of said drive wheel (5) is arranged in said guide plane (25) of said vertical guide rails (24) correlated to the vertical long central place of said elevator cage.

16. An elevator as defined in one of the preceding claims, characterized in that
the speed of said drive wheel (9) is geared down with respect to the speed of said drive motor (6) and said cage is suspended on said support in block (i.e. at least in a ratio 2:1).